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ABSTRACT

The purpose of this study is to collect, analyze, and report on statistics and program information relative to selected aspects of the overall budget and program of selected large city school systems. Furthermore, the intent is to isolate areas of variation in what is seemingly common operation and by means of adjustment, whether it be in the form of calculation or definition, provide for decision makers that data which may be compared. The school systems included are seven large city school systems with characteristics similar to those of the public schools of the District of Columbia. The eight systems reported are: Atlanta, Baltimore, Boston, Cleveland, Milwaukee, St. Louis, San Francisco, and Washington, D.C. The study began in August 1974 with requests to each of the participants for copies of school system and city budgets for fiscal years 1974 and 1975. The report is organized into four substudies, each dealing with a major area of high priority interest to the public schools of the District of Columbia. Expenditures per pupil, the subject of Substudy 1, and staffing, the subject of Substudy 2, are key indicators of the level and allocation of resources within each school system. Substudy 3, dealing with special education, and Substudy 4, dealing with capital outlay programs, look at two specific areas of importance in current planning and budget efforts. (Author/JM)

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Public Schools of the District of Columbia

A STUDY OF COMPARATIVE DATA
IN EIGHT LARGE CITY SCHOOL SYSTEMS.
FY 1974 AND FY 1975

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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INTRODUCTION

The consideration of budget requests and allocation of resources by a governing body generates the need for objective information upon which to base decisions. This has been the case in the District of Columbia where the budgets for the Public Schools of the District of Columbia have been studied by the City Council and the Congressional Sub-committees on Appropriations for the District of Columbia. Over the years these groups have required the school system in the District to provide various types of data not only on the Public Schools of the District of Columbia, but on school systems in other large cities and in the surrounding metropolitan area. These data were then used for comparative measurement which resulted in questions being posed, responses being provided, and subsequent determinations being made.

While the above process is a legitimate one, the school administration of the D. C. Public Schools has had great concern, not over the process but over the authenticity of the figures being compared. It has been the position of the schools that due to the variations in definitions, organization, procedures, and environment, information cannot be used as presented by an individual school system; rather, such data must be considered from a common base. Therefore, during 1970 and 1971 the

Division of Research and Evaluation and the Division of Budget of the D. C. Public Schools emphasized the stated position by undertaking a study to analyze the data from a number of selected large city school systems.

The 1970 study used as its sample the seven large cities which the agencies of the D. C. Government had agreed could most realistically be compared with Washington, D. C. because of similar size and structure. In studying documents issued by these cities, staff soon discovered variations from city to city. It also became apparent that the study would have to be limited due to the limitations of resources for the study. Therefore, two areas basic to school system budgetary deliberations were decided upon, namely, per pupil expenditures and the number of professionals per thousand pupils in the school enrollment.

Staff of the Division of Research and Evaluation and Budget visited the school systems of the selected cities. Discussions were held with appropriate staff about the content and meaning of various reports and documents. The data used was for the school year 1969-70. The in-depth analysis of this data based on the documents and interpretations by the personnel in the sample city school systems showed that the cities differed greatly on certain sources of income for handling certain costs such as retirement, health services, transportation, and community services. It also indicated that methods of computation of certain statistics varied from city to city.

In order to make the data more useful, the researchers in the 1970 study decided to present data as provided by each city school system and to then point out variations from city to city. The final step was to

identify those items or factors which were unlike and to remove them from the per pupil cost computation. This procedure resulted in a series of tables which emphasized the variations and culminated in a table which showed that with non-common factors eliminated the differential between per pupil expenditures from city to city lessened dramatically.

The 1970 study provided the City Council and Congressional Committees at that time with factual information which related to multiple topics on which decisions had to be made. Since 1970 a replication of the study has not taken place. However, recently concern over statistics being compared has continued to mount on the part of both the D. C. Public Schools and the D. C. Government, therefore, in the fall of 1974, both agencies agreed to support a study of comparative data in the school systems of the selected large cities. This study has been conducted and is reported on the following pages.

A STUDY OF COMPARATIVE DATA FOR FY 1974 AND FY 1975
IN EIGHT LARGE CITY SCHOOL SYSTEMS

The purpose of the study is to collect, analyze, and report on statistics and program information relative to selected aspects of the overall budget and program of selected large city school systems. Furthermore, the intent is to isolate areas of variation in what is seemingly common operation and by means of adjustment, whether it be in the form of calculation or definition, provide for decision makers that data which may be compared.

The findings of the study will be reported in a series of separate sub-studies, each one dealing with one major area of interest.

Procedures

The school systems included in the current study are seven large city school systems with characteristics similar to those of the Public Schools of the District of Columbia. The eight systems reported are: Atlanta, Baltimore, Boston, Cleveland, Milwaukee, St. Louis, San Francisco, and Washington, D. C.

The researchers who conducted the study are Dr. Mildred P. Cooper of the Public Schools of the District of Columbia and Mr. King Nelson of IBEX.

The study began in August 1974 with requests to each of the participants for copies of school system and city budgets for fiscal years 1974 and 1975. An in-depth review of each of these documents was made. Simultaneously, meetings were held with D. C. Public School Personnel and a representative of the D. C. City Government Budget Division for the

purpose of finalizing the design of the study.

For each area of interest indicated in the design of the study, an interview schedule was developed by staff of IBEX and of the D. C. school system. A pilot was made and refinements of the instruments effected.

A visitation schedule with each of the participant school systems was established. The key contact person in each school system arranged for a concentrated, continuous, interviewing itinerary with as many as 9 to 12 different individual conferences in a single day visitation. During these interviews, the prepared interview guide was followed with additional questions included as needed. Each person interviewed provided documents, forms, and reports; where information was not immediately available, this was later mailed to the researchers. Follow-up telephone calls were used to clarify and augment the information gathered during the visits.

The designated areas of interest in the study were prioritized in terms of the D. C. Public School System's needs for information. Highest priority indicated is the need for comparative data on expenditure per student. Next most urgent is the number of professional staff per thousand students.

As stated above, the results of the study will be presented in separate sections. The analysis of the expenditures per student among the eight large city school systems comprises sub-study one. Sub-study two reports on the comparison of staffing per one thousand students for the participating school systems.

A COMPARISON OF EXPENDITURES PER PUPIL
AMONG EIGHT LARGE CITY SCHOOL SYSTEMS

General Considerations

The objective of this area of the study is to develop and present expenditure per pupil figures for each of the eight school districts in the study for the years 1973-74 and 1974-75. Although each of the school systems can readily produce expenditure per pupil data, the services provided by the systems to their students and the methods of computation vary so widely that comparisons of figures reported by individual systems are grossly misleading.

In studying the content of such program areas as continuing and adult education, food services, community activities, summer school and health services, it was found that the basic per pupil expenditure figures are distorted because of the large range in the level of resources allocated to these functions. Also, the extent to which capital outlay, fringe benefits and various state and Federal fund sources are included in the computations further reduces the comparability of the results. A final distortion of the statistics is due to the methods for determining the size of the pupil population. Fall enrollment, active role, average daily membership (ADM), and average daily attendance (ADA) are terms which appear in various districts' computations. Even where the same statistic is used, its composition varies as the result of such factors as the treatment of prekindergarten, kindergarten,

summer school, adult, and part-time students.

Therefore, there were two general approaches which might be followed in presenting expenditures per pupil for the eight districts: the figures provided by the districts could be used, with explanations of the many resulting incompatibilities; or a more comparable set of figures could be developed from the basic program, budget, and membership information available to the study team.

It was decided not to use the first approach due to the fact that the differences to be explained are so great that the study would consist primarily of reservations and constraints on the interpretation and use of the information.

If the second approach were chosen it would be necessary to establish just how compatible the results should be. It would be impossible to produce expenditure per pupil figures for each district based on exactly the same set of programs and services, the same sources of funds, and the same method of student membership determination. Even if the necessary data were available, the results would exclude too many programs and resources to be of enough value.

The approach which was selected was a compromise between the first and the second approaches stated above. The compromise permits comparisons with currently used per pupil expenditure figures for the District of Columbia Public Schools and the retention of most major operating programs and services in the computations.

Computation Procedures

Per pupil expenditure is one measure of the performance of a school system. Generally, per pupil expenditure is defined as the average amount of money spent by a given school system on each pupil for administration, instructional services, plant operation and maintenance, fixed charges, and other school services. According to the U. S. Office of Education of the Department of Health, Education and Welfare four factors need to be considered in the determination of per pupil expenditures for education. These are: (1) the pupil unit of measure to be used (for example, average daily membership, average daily attendance, pupil enrollment); (2) the expenditure accounts to be included (for example, administration, instruction, operation of plant); (3) the period of time for which a per-pupil expenditure figure is to be computed (for example, a year, a day, an hour); and (4) the program areas to be included in a per pupil expenditure figure (for example, elementary schools, secondary schools, adult education). ^{1/}

The per pupil expenditure figures currently used by the District of Columbia Public Schools are computed both for regular appropriated operating funds and for Federal grants. In this study, the total operating expenditure figure is reduced by the amount of food services and continuing education costs to give an adjusted expenditure amount

^{1/} State Educational Records and Reports Series: Handbook II, U. S. Department of Health, Education, and Welfare, Office of Education. 1966 and Handbook II revised, 1974.

for both appropriated and Federal funding. The per pupil cost does not include capital outlay, nor does it include health services (which are provided by the District Government) or summer school and community services (which are included in the continuing education category). It is this adjusted operating expenditure computation that is the basis for the determination of all expenditure figures in this study.

For each of the other seven school districts, a Total Operating Budget, including state funded programs, was determined from data provided by the school system considered. For some school systems this figure includes all or a portion of the capital outlay expenditures, where they are carried in the operating budget. For other districts, it was necessary to augment their normal operating budgets to account for common items such as retirement benefits and plant maintenance, which are being funded from other sources. Appropriate deductions from the Total Operating Budgets then were made to remove continuing and adult education, food services, health services, summer school and capital outlay. The result was a set of Adjusted Operating Budget figures..

With regard to Federal expenditures, a Total Federal Program Budget was determined for each school system. For the District of Columbia Public Schools, this figure includes all Federal funds. For the other systems in the study, this figure includes all Federal funds with the exception of those funds normally included in the operating budget (i.e., impact aid and, for some districts, vocational education and NDEA funds). A deduction from the Total Federal Program Budget was made for food subsidies and other funds directly related to food services.

Although the District of Columbia school system currently deducts the costs of continuing education as well, this figure generally could not be accurately estimated for the other systems' Federal budgets. Since continuing education accounts for such a small proportion of Federal funds (less than 1% in the District of Columbia), it was decided not to consider it as a deduction.

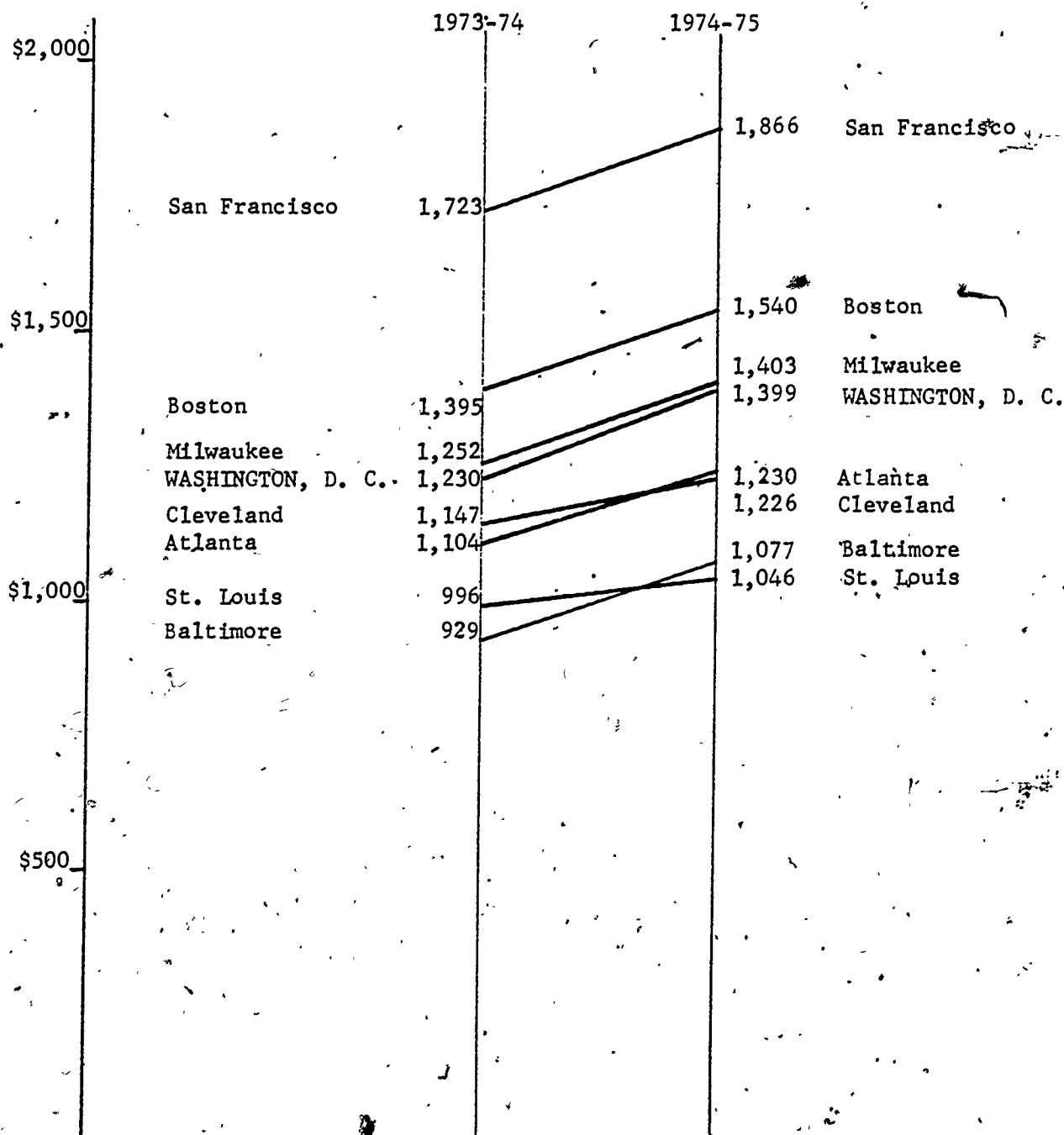
All pupil membership figures were computed as follows: A fall membership count was obtained from each district for all regular students in grades pre-kindergarten through 12. If this figure was based on a "head count", it was adjusted to a "full time equivalent" value to reflect half day pre-kindergarten and half day kindergarten students. An estimated Average Daily Membership (ADM) for the school year was then computed using a percentage of the adjusted fall membership count.

The resulting Expenditure Per Pupil for the Adjusted Operating Budget, the Adjusted Federal Program Budget figures, and the Total Adjusted Budget figures for the eight school systems for the 1973-74 and 1974-75 school years along with related computations are shown in a series of tables on pages 12 through 19. The asterisk on the 1974-75 column designates "estimated" due to the fact that supplemental funds may be added to the Total Operating Budget during the course of the fiscal year.

Summary charts of the expenditures per pupil for each of the participating school systems for both 1973-74 and 1974-75 appear on the following pages. The figures are based on comparable programs and services, on like funding sources, and on an adjusted membership count. The first exhibit shows the expenditure per pupil for only regular appropriated funds. Exhibit two displays total expenditures per pupil; this includes regular appropriated funds and Federal funds.

Exhibit I

A COMPARISON* OF EXPENDITURES PER PUPIL BASED ON REGULAR APPROPRIATED FUNDS IN EIGHT LARGE CITY SCHOOL SYSTEMS FOR FISCAL YEAR 1974 AND FISCAL YEAR 1975



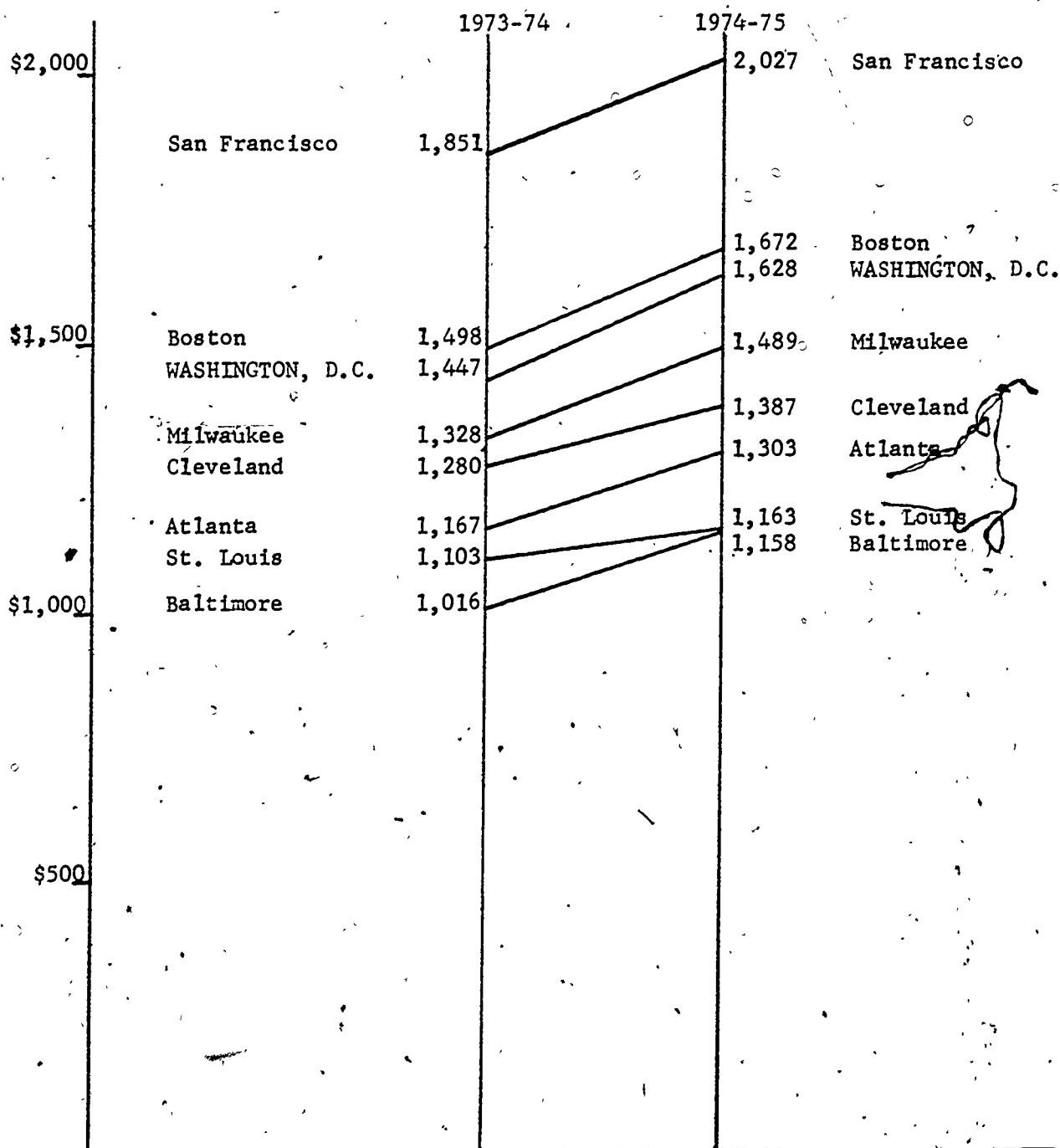
* Comparable programs and services and an adjusted pupil membership are used. Does not include Federal funds.

Source of Data (Exhibits I and II): School system budget and membership reports.

(11a)

Exhibit II

A COMPARISON OF TOTAL EXPENDITURES PER PUPIL* IN EIGHT LARGE CITY SCHOOL SYSTEMS FOR FISCAL YEAR 1974 AND FISCAL YEAR 1975



* Based on comparable programs and services, like funding sources, and an adjusted pupil membership count. Includes regular appropriated funds and Federal funds.

ATLANTA

Adjustments to the Total Operating Budget - Adjustments consist of deductions for adult education (Area Tech School), health services, 4th quarter (summer session), food service deficit, community services, capital outlay, and related fringe benefits.

Adjustment to Fall Membership - The adjustment consists of the conversion of $\frac{1}{2}$ day kindergarten students to full day equivalents. The kindergarten membership is estimated to be $\frac{1}{7}$ of the total elementary membership in Atlanta.

Sources - Financial data related to regular appropriated funds is from the 1973-74 and 1974-75 budget documents. Federal fund data is from the 1973-74 report to the state department of education and from staff interviews.

Table 1

EXPENDITURES PER PUPIL BASED ON COMPARABLE PROGRAMS AND SERVICES,
LIKE FUNDING SOURCES, AND AN ADJUSTED PUPIL MEMBERSHIP COUNT

ATLANTA

<u>Procedures</u>	<u>1973-74</u>	<u>1974-75*</u>
<u>Regular Appropriated Funds</u>		
Total Operating Budget	\$103,002.7	\$109,346.5
Less Adjustments (see facing page for details)	<u>- 9,711.3</u>	<u>- 8,787.7</u>
Adjusted Operating Budget	<u>\$ 93,291.4</u>	<u>\$100,558.8</u>
Fall Membership	89,128	86,201
Less Adjustments (see facing page for details)	<u>-3,748</u>	<u>-3,590</u>
Adjusted Fall Membership	<u>85,380</u>	<u>82,611</u>
Estimated Average Daily Membership	<u>84,526</u>	<u>81,785</u>
Expenditure Per Pupil	<u>\$ 1,104</u>	<u>\$ 1,230</u>
<u>Federal Funds</u>		
Total Federal Program Budget - no food subsidy	<u>\$ 5,286.9</u>	<u>\$ 5,976.4</u>
Estimated Average Daily Membership	<u>84,526</u>	<u>81,785</u>
Expenditure Per Pupil	<u>\$ 63</u>	<u>\$ 73</u>
<u>Regular and Federal Funds Combined</u>		
TOTAL Expenditures Per Pupil	<u>\$ 1,167</u>	<u>\$ 1,303</u>
* Estimated		
Sources: See facing page.		

BALTIMORE

Total Operating Budget - Consists of General Funds and Non-Federal Special Funds.

Adjustments to the Total Operating Budget - Adjustments consist of deductions for adult education, health services, food services, community services, and debt service.

Adjustments to Fall Membership - The adjustments consist of the conversion of $\frac{1}{2}$ day pre-kindergarten students and $\frac{1}{2}$ day kindergarten students to full time-equivalents.

Sources - The 1974-75 city budget and interviews with staff.

Table II

EXPENDITURES PER PUPIL BASED ON COMPARABLE PROGRAMS AND SERVICES, LIKE
FUNDING SOURCES, AND AN ADJUSTED PUPIL MEMBERSHIP COUNT

BALTIMORE

<u>Procedures</u>	<u>1973-74</u>	<u>1974-75*</u>
<u>Regular Appropriated Funds</u>		
Total Operating Budget	\$194,562.5	\$210,147.7
Less Adjustments (see facing - page for details)	<u>-32,247.2</u>	<u>-32,071.7</u>
Adjusted Operating Budget	<u>\$162,315.3</u>	<u>\$178,076.0</u>
Fall Membership	182,911	173,428
Less Adjustments (see facing page for details)	<u>-6,358</u>	<u>-6,365</u>
Adjusted Fall Membership	<u>176,553</u>	<u>167,063</u>
Estimated Average Daily Membership	<u>174,788</u>	<u>165,392</u>
Expenditure Per Pupil	<u>\$ 929</u>	<u>\$ 1,077</u>
<u>Federal Funds</u>		
Total Federal Program Budget	\$ 24,199.8	\$ 22,712.2
Less Food Subsidies	<u>-9,072.5</u>	<u>-9,360.0</u>
Adjusted Federal Program Budget	<u>\$ 15,127.3</u>	<u>\$ 13,352.2</u>
Estimated Average Daily Membership	<u>174,142</u>	<u>165,698</u>
Expenditure Per Pupil	<u>\$ 87</u>	<u>\$ 81</u>
<u>Regular and Federal Funds Combined</u>		
TOTAL Expenditures Per Pupil	<u>\$ 1,016</u>	<u>\$ 1,158</u>

* Estimated

Sources: See facing page.

BOSTON

Total Operating Budget - Consists of General Funds, retirement payments by city and state, and estimated plant maintenance costs carried by city.

Adjustments to the Total Operating Budget - Adjustments consist of deductions for evening and summer school, food service deficit, community services, and related fringe benefits.

Adjustment to Fall Membership - Consists of the conversion of $\frac{1}{2}$ day kindergarten students to full time equivalents. The kindergarten membership was estimated to be 8,000 students.

Sources - Financial data related to regular/appropriated funds is from the 1974-75 budget documents. Estimates of federal funds and city and state contributions are from interviews with staff.

Table III.

EXPENDITURES PER PUPIL BASED ON COMPARABLE PROGRAMS AND SERVICES, LIKE FUNDING SOURCES, AND AN ADJUSTED PUPIL MEMBERSHIP COUNT

BOSTON

<u>Procedures</u>	<u>1973-74</u>	<u>1974-75*</u>
<u>Regular Appropriated Funds</u>		
Total Operating Budget	\$126,795.1	\$131,273.6
Less Adjustments (see facing page for details)	<u>-2,974.8</u>	<u>-4,453.1</u>
Adjusted Operating Budget	<u>\$123,820.3</u>	<u>\$126,820.5</u>
Fall Membership	93,647	87,169
Less Adjustments (see facing page for details)	<u>-4,000</u>	<u>-4,000</u>
Adjusted Fall Membership	<u>89,647</u>	<u>83,169</u>
Estimated Average Daily Membership	<u>88,750</u>	<u>82,337</u>
Expenditure Per Pupil	\$ <u>1,395</u>	\$ <u>1,540</u>
<u>Federal Funds</u>		
Total Federal Program Budget	\$ 12,350.0	\$ 14,000.0
Less Food Subsidies	<u>-3,200.0</u>	<u>-3,000.0</u>
Adjusted Federal Program Budget	\$ <u>9,150.0</u>	\$ <u>11,000.0</u>
Estimated Average Daily Membership	<u>88,750</u>	<u>82,337</u>
Expenditure Per Pupil	\$ <u>103</u>	\$ <u>132</u>
<u>Regular and Federal Funds Combined</u>		
TOTAL Expenditures Per pupil	\$ <u>1,498</u>	\$ <u>1,672</u>
* Estimated		

Sources: See facing page.

CLEVELAND

Total Operating Budget - Consists of the General Fund, the Lunch Fund, the Trust Fund, the Disadvantaged Pupil Program Fund, and the Uniform Supply Fund.

Adjustments to the Total Operating Budget - Consists of deductions for adult education, food services, health services, community services, capital outlay, and related fringe benefits.

Adjustment to Fall Membership - Consists of the conversion of $\frac{1}{2}$ day kindergarten students to full time equivalents. The kindergarten membership was estimated to be 10,000 students.

Sources - Financial data for 1973-74 is from the report to the state department of education and from staff interviews. The 1974-75 data is estimated from the 1974 and 1975 budget documents and from staff interviews.

Table IV

EXPENDITURES PER PUPIL BASED ON COMPARABLE PROGRAMS AND SERVICES, LIKE
FUNDING SOURCES, AND AN ADJUSTED PUPIL MEMBERSHIP COUNT

CLEVELAND

<u>Procedures</u>	<u>1973-74</u>	<u>1974-75*</u>
<u>Regular Appropriated Funds</u>		
Total Operating Budget	\$159,080.9	\$162,503.1
Less Adjustments (see facing page for details)	<u>-10,230.2</u>	<u>-10,537.1</u>
Adjusted Operating Budget	<u>\$148,850.7</u>	<u>\$151,966.0</u>
Fall Membership	136,105	130,186
Less Adjustments (see facing page for details)	<u>-5,000</u>	<u>-4,959</u>
Adjusted Fall Membership	<u>131,105</u>	<u>125,227</u>
Estimated Average Daily Membership	<u>129,794</u>	<u>123,974</u>
Expenditure Per Pupil	<u>\$ 1,147</u>	<u>\$ 1,226</u>
<u>Federal Funds</u>		
Total Federal Program Budget	\$ 22,739.8	\$ 28,400.0
Less Food Subsidies	<u>-5,528.3</u>	<u>-8,400.0</u>
Adjusted Federal Program Budget	<u>\$ 17,211.5</u>	<u>\$ 20,000.0</u>
Estimated Average Daily Membership	<u>129,794</u>	<u>123,974</u>
Expenditure Per Pupil	<u>\$ 133</u>	<u>\$ 161</u>
<u>Regular and Federal Funds Combined</u>		
TOTAL Expenditures Per Pupil	<u>\$ 1,280</u>	<u>\$ 1,387</u>

* Estimated

Sources: See facing page.

MILWAUKEE

Total Operating Budget - Consists of the Operating Funds less categorical federal programs.

Adjustments to the Total Operating Budget - Consist of deductions for community services, non-federal food services, capital outlay, and summer school.

Fall Membership - The fall membership count is a full time equivalent count and, therefore, no adjustments for part time are required.

Sources - Financial data for 1973-74 is from the 115th Annual Report and from staff interviews. The 1974-75 data is estimated from the 1974 and the 1975 budget documents and from staff interviews.

Table V

EXPENDITURES PER PUPIL BASED ON COMPARABLE PROGRAMS AND SERVICES, LIKE
FUNDING SOURCES, AND AN ADJUSTED PUPIL MEMBERSHIP COUNT

MILWAUKEE

<u>Procedures</u>	<u>1973-74</u>	<u>1974-75*</u>
<u>Regular Appropriated Funds</u>		
Total Operating Budget	\$153,730.8	\$165,109.9
Less Adjustments (see facing page for details)	<u>-7,151.9</u>	<u>-7,317.0</u>
Adjusted Operating Budget	<u>\$146,578.9</u>	<u>\$157,792.9</u>
Fall Membership (see facing page)	<u>118,283</u>	<u>113,643</u>
Estimated Average Daily Membership	<u>117,100</u>	<u>112,507</u>
Expenditure Per Pupil	<u>\$ 1,252</u>	<u>\$ 1,403</u>
<u>Federal Funds</u>		
Total Federal Program Budget	\$ 13,597.7	\$ 14,111.0
Less Food Subsidies	<u>-4,739.8</u>	<u>-4,400.0</u>
Adjusted Federal Program Budget	<u>\$ 8,857.9</u>	<u>\$ 9,711.0</u>
Estimated Average Daily Membership	<u>117,100</u>	<u>112,507</u>
Expenditure Per Pupil	<u>\$.76</u>	<u>\$.86</u>
<u>Regular and Federal Funds Combined</u>		
TOTAL Expenditures Per Pupil	<u>\$ 1,328</u>	<u>\$ 1,489</u>

* Estimated

Sources: See facing page.

ST. LOUIS

Total Operating Budget - Consists of the Teacher Fund, the Incidental Fund, and the Textbook Fund.

Adjustments to the Total Operating Budget - Consist of deductions for summer school, health services, community services, administrative food service costs, and related fringe benefits.

Fall Membership / The fall membership count is a full time equivalent count and, therefore, no adjustments for part time are required.

Sources - Data is from the 1974-75 budget documents and staff interviews.

Table VI

EXPENDITURES PER PUPIL BASED ON COMPARABLE PROGRAMS AND SERVICES, LIKE
FUNDING SOURCES, AND AN ADJUSTED PUPIL MEMBERSHIP COUNT

ST. LOUIS

<u>Procedures</u>	<u>1973-74</u>	<u>1974-75*</u>
<u>Regular Appropriated Funds</u>		
Total Operating Budget	\$ 89,806.1	\$ 90,914.2
Less Adjustments (see facing page for details)	<u>-651.0</u>	<u>-605.8</u>
Adjusted Operating Budget	\$ <u>89,155.1</u>	\$ <u>90,308.4</u>
Fall Membership (see facing page)	<u>90,383</u>	<u>87,215</u>
Estimated Average Daily Membership	<u>89,479</u>	<u>86,343</u>
Expenditure Per Pupil	\$ <u>996</u>	\$ <u>1,046</u>

Federal Funds

Total Federal Program Budget	\$ 13,055.0	\$ 15,721.5
Less Food Subsidies	<u>-3,438.0</u>	<u>-5,607.4</u>
Adjusted Federal Program Budget	\$ <u>9,617.0</u>	\$ <u>10,114.1</u>
Estimated Average Daily Membership	<u>89,479</u>	<u>86,343</u>
Expenditure Per Pupil	\$ <u>107</u>	\$ <u>117</u>

Regular and Federal Funds Combined

TOTAL Expenditures Per Pupil	\$ <u>1,103</u>	\$ <u>1,163</u>
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* Estimated

Sources: See facing page.

SAN FRANCISCO

Total Operating Budget - Consists of the General Fund, The Development Centers Fund, the County Fund, the Cafeteria Fund, and state categorical programs.

Adjustments to the Total Operating Budget - Consist of deductions for health services, food services, facilities acquisition, and construction and county educational services.

Adjustment to Fall Membership - The adjustment consists of the conversion of $\frac{1}{2}$ day kindergarten students to full time equivalents.

Sources - Data is from the 1973-74 report to the state department of education, the 1974-75 budget documents and staff interviews.

Table VII

EXPENDITURES PER PUPIL BASED ON COMPARABLE PROGRAMS AND SERVICES, LIKE FUNDING SOURCES, AND AN ADJUSTED PUPIL MEMBERSHIP COUNT

SAN FRANCISCO

<u>Procedures</u>	<u>1973-74</u>	<u>1974-75</u> *
<u>Regular Appropriated Funds</u>		
Total Operating Budget	\$139,801.6	\$142,771.5
Less Adjustments (see facing page for details)	<u>-13,623.6</u>	<u>-13,783.7</u>
Adjusted Operating Budget	<u>\$126,178.0</u>	<u>\$128,987.8</u>
Fall Membership	76,688	72,475
Less Adjustments (see facing page for details)	<u>-2,733</u>	<u>-2,670</u>
Adjusted Fall Membership	<u>73,955</u>	<u>69,805</u>
Estimated Average Daily Membership	<u>73,215</u>	<u>69,107</u>
Expenditure Per Pupil	\$ <u>1,723</u>	\$ <u>1,866</u>

Federal Funds

Total Federal Program Budget- (no food subsidy)	\$ <u>9,365.7</u>	\$ <u>11,136.0</u>
Estimated Average Daily Membership	<u>73,215</u>	<u>69,107</u>
Expenditure Per Pupil	\$ <u>128</u>	\$ <u>161</u>

Regular and Federal Funds Combined.

TOTAL Expenditures Per Pupil	\$ <u>1,851</u>	\$ <u>2,027</u>
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* Estimated

Sources: See facing page.

WASHINGTON, D. C.

Adjustments to the Total Operating Budget - Consist of deductions for food services and for continuing education.

Adjustments to Fall Membership - Consist of deductions for STAY Program students and the conversion of $\frac{1}{2}$ day pre-kindergarten students and $\frac{1}{2}$ day kindergarten students to full time equivalents.

Sources - 1973-74 and 1974-75 budget documents and supporting documentation.

Table VIII

EXPENDITURES PER PUPIL BASED ON COMPARABLE PROGRAMS AND SERVICES, LIKE FUNDING SOURCES, AND AN ADJUSTED PUPIL MEMBERSHIP COUNT

WASHINGTON, D. C.

<u>Procedures</u>	<u>1973-74</u>	<u>1974-75*</u>
<u>Regular Appropriated Funds</u>		
Total Operating Budget	\$167,807.5	\$187,574.6
Less Adjustments (see facing page for details)	<u>-8,345.8</u>	<u>-9,020.4</u>
Adjusted Operating Budget	<u>\$159,461.7</u>	<u>\$178,554.2</u>
Fall Membership	<u>136,467</u>	<u>132,239</u>
Less Adjustments (see facing page for details)	<u>-5,539</u>	<u>-3,309</u>
Adjusted Fall Membership	<u>130,928</u>	<u>128,930</u>
Estimated Average Daily Membership	<u>129,619</u>	<u>127,608</u>
Expenditure Per Pupil	<u>\$ 1,230</u>	<u>\$ 1,399</u>
<u>Federal Funds</u>		
Total Federal Program Budget	\$ 35,642.2	\$ 36,760.4
Less Adjustments for Food Services and Continuing Education	<u>-7,514.9</u>	<u>-7,515.0</u>
Adjusted Federal Program Budget	<u>\$ 28,127.3</u>	<u>\$ 29,245.4</u>
Estimated Average Daily Membership	<u>129,619</u>	<u>127,608</u>
Expenditure Per Pupil	<u>\$ 217</u>	<u>\$ 229</u>
<u>Regular and Federal Funds Combined</u>		
TOTAL Expenditures Per Pupil	<u>\$ 1,447</u>	<u>\$ 1,628</u>

* Estimated

Sources: See facing page.

Sub-Study Two

A COMPARISON OF STAFFING PER ONE THOUSAND STUDENTS AMONG EIGHT LARGE CITY SCHOOL SYSTEMS

The provision of professional staffing in a school system is most frequently considered in terms of the services to be offered and the number of students to be served in concert with the funding available. One approach to determining the quantity of professional staff needed is through the establishment of a ratio of staff members to the number of students who are to be accommodated.

The thrust of every school system is to offer an educational program to every student enrolled. That educational program is provided by means of an instructional aspect and a non-instructional aspect.

The instructional segment which supplies the learning opportunities for the student membership must be supported by the non-instructional; without such support it cannot function effectively. To carry out the instructional aspect both professional and non-professional staff members are required; to accomplish the non-instructional aspect both professional and non-professional staff members are required.

In looking at this team approach represented by the instructional and non-instructional parts of the educational program, it becomes obvious that a "resource mix" of many different positions and things are necessary to successfully effect the program. How can this "resource mix" be defined? In terms of positions it can be described as the total number of positions required to provide the desired educational program per one thousand students. This can be expressed in

terms of the number of professional staff and in terms of the non-professional staff per one thousand students.

Professional Staff Per Thousand Students

A study of the professional positions in the "resource mix" of the participating large city systems revealed interesting variations. Base data was secured from the budget, personnel, and membership reports published by the system. Clarification and interpretation of these reports were provided by appropriate staff members of the school systems in order to insure comparable definitions and classifications. In compiling the data care was taken to categorize uniformly the positions into professional-instructional and professional non-instructional. Instructional positions were those, both central and local school based, in line and staff functions related to the instructional program. Non-instructional positions were those, both central and local school based, in line and staff functions not related to the instructional program. The student membership was the official fall single day membership in each school system adjusted for full-time equivalency.

The data is shown in a table on the following page. Included are the membership figures, the number of professional staff divided into instructional and non-instructional categories, the total number of professional staff and the number of professional staff members per 1,000 students in the school system. Each of the above items is shown for the school years 1973-74 and 1974-75. A review of the table indicates that the number of professionals per 1,000 students in 1973-74 ranged from 47.7 to 66.3 in the eight participating school systems; in 1974-75 the number of professionals per 1,000 students ranged from 48.5 to 67.5.

Table IX

NUMBER OF PROFESSIONAL STAFF, STUDENT MEMBERSHIP, AND
PROFESSIONALS PER THOUSAND STUDENTS
FOR FISCAL YEAR 1974 AND FISCAL YEAR 1975

(Based On
Regular Appropriated Funds Only
and
Full Time Single Day Membership Figures)

School System	Student Membership Based on Full Time Equivalent		Number of Professional Staff				Total Number of Professional Staff		Number of Professional Staff Per 1,000 Students
	1973-74	1974-75	Instructional	Non-Instructional	1973-74	1974-75	1973-74	1974-75	
Atlanta	85,380	82,611	5,467	5,061	161	144	5,628	5,205	65.9
Baltimore	176,558	167,063	9,017	9,277	605	623	9,622	9,900	54.5
Boston	93,647	87,169	5,423	5,631	193	253	5,616	5,884	60.0
Cleveland	151,105	125,227	5,829	5,807	894	933	6,723	6,740	51.3
Milwaukee	118,283	113,643	6,165	5,877	355	453	6,520	6,330	55.1
St. Louis	90,383	87,215	4,172	4,055	138	177	4,310	4,232	47.7
San Francisco	73,955	69,805	4,552	4,362	353	335	4,905	4,697	66.2
Washington, D. C.	130,928	128,930	7,673	7,699	387	409	8,060	8,108	61.6
									62.9

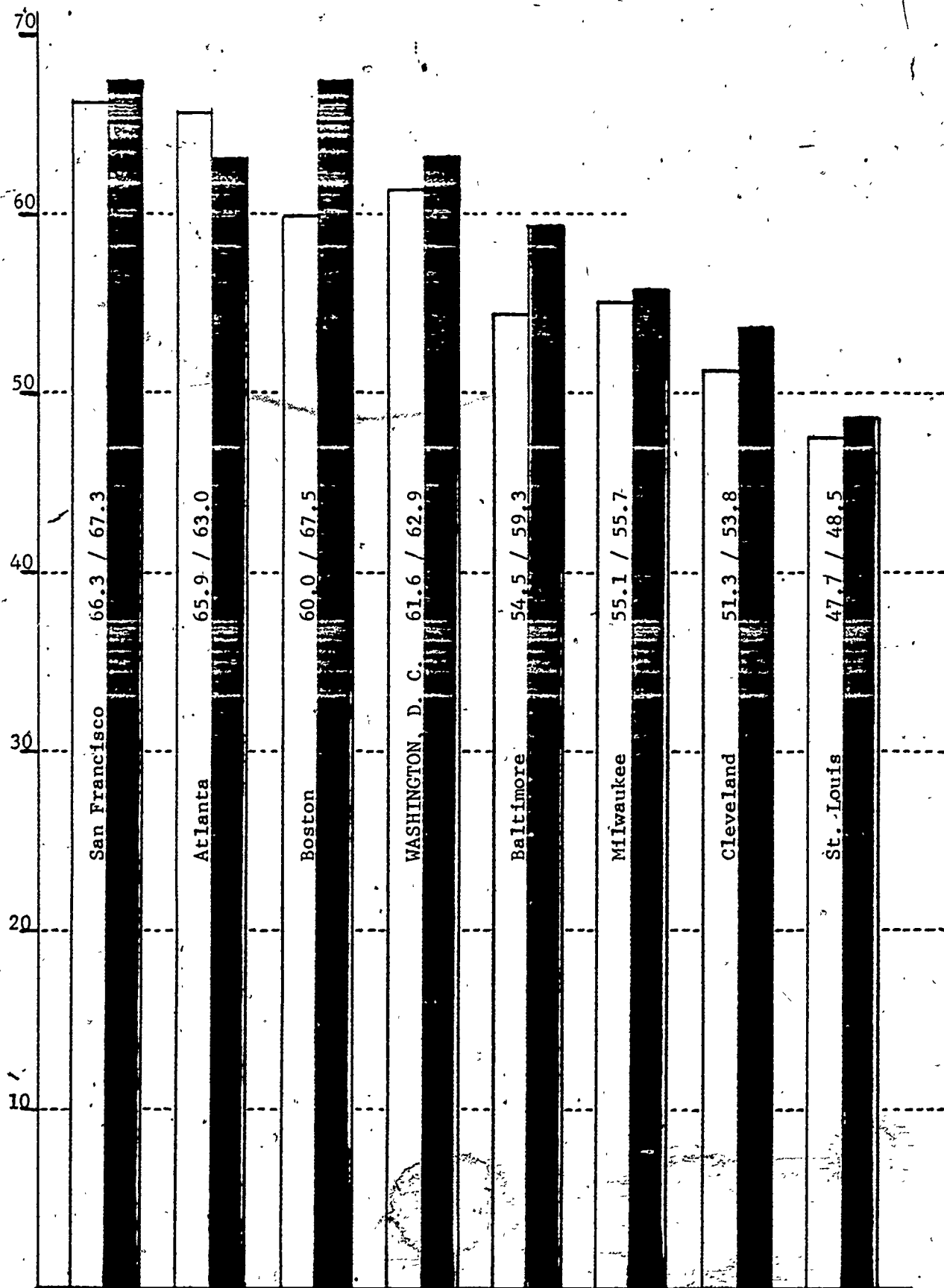
1/ Full membership adjusted for full time equivalents. Adjusted single day membership figures were used, not average daily membership.

2/ Includes all professional level positions, both central and local school based, in line and staff functions related to the instructional program.

3/ Includes professional level positions, both central and local school based, in line and staff functions not specific to the instructional program.

Source of Data: School System Budget, Personnel, and Statistical Documents.

PROFESSIONAL STAFF PER THOUSAND STUDENTS IN EIGHT LARGE
CITY SCHOOL SYSTEMS FOR FISCAL YEAR 1974 AND FISCAL YEAR 1975



(FY 1975 Shaded)

Clearly indicated by the data is the fact that school systems place the greatest of emphasis on the establishment of professional services in the instructional operation. All but one of the participating systems have over 92% of their professional staff in the instructional program. The table below displays the percentage of instructional professional staff to total professional staff of each of the participating systems.

Table X

PERCENT OF INSTRUCTIONAL PROFESSIONAL STAFF
TO TOTAL PROFESSIONAL STAFF FOR FY 1974 AND FY 1975

School System	1973-74	1974-75
Atlanta	97.1	97.2
Baltimore	93.7	93.7
Boston	96.7	95.7
Cleveland	86.7	86.2
Milwaukee	94.6	92.8
St. Louis	96.8	95.8
San Francisco	92.8	92.9
Washington, D.C.	95.2	95.0

Source: School system budget and personnel documents.

From the point of reference of the non-instructional professional staff, it is of interest to note the relationship of that category of staff to the total professional staff and also its relationship to the

total school system staff. These data are shown in Table XI which follows:

Table XI

PERCENT OF NON-INSTRUCTIONAL PROFESSIONAL STAFF TO TOTAL PROFESSIONAL STAFF AND TO TOTAL SCHOOL SYSTEM STAFF FOR FY 1974 AND FY 1975

School System	% of Non-Instructional Professional Staff to Total Professional Staff		% of Non-Instructional Professional Staff to Total School System Staff	
	1973-74	1974-75	1973-74	1974-75
Atlanta	2.9	2.8	2.1	2.0
Baltimore	6.3	6.3	4.6	4.8
Boston	3.4	4.3	3.4	4.3
Cleveland	13.3	13.8	8.2	8.4
Milwaukee	5.4	7.2	4.0	4.9
St. Louis	3.2	4.2	2.3	3.0
San Francisco	7.2	7.1	5.2	5.4
Washington, D. C.	4.8	5.0	3.7	3.8

Source: School system budget and personnel documents.

The complete portrayal of school system staffing for the instructional program includes both the professional and non-professional staffing. The number of positions in these categories is shown in Table XII on the following page.

Table XII

NUMBER OF PROFESSIONAL AND NON-PROFESSIONAL
INSTRUCTIONAL STAFF MEMBERS FOR FY 1974 AND FY 1975^{1/}

School System	Number of Instructional Staff		3/-	Total Number of	
	Professional Instructional ^{2/} 1973-74	Non-Professional Instructional 1974-75		Instructional Staff 1973-74	Instructional Staff 1974-75
Atlanta	5,467	5,061	481	5,875	5,542
Baltimore	9,017	9,277	470	9,558	9,747
Boston	5,423	5,631	-	-	-
Cleveland	5,829	5,807	1,668	7,429	7,475
Milwaukee	6,165	5,877	1,935	7,559	7,812
St. Louis	4,172	4,055	404	4,451	4,459
San Francisco	4,552	4,362	144	5,065	4,506
Washington, D. C.	7,673	7,699	132	7,810	7,831

^{1/} Based on regular appropriated funds only.

^{2/} Includes all professional level positions, both central and local school based, in line and staff functions related to the instructional program.

^{3/} Includes non-professional level positions, both central and local school based, in line and staff functions related to the instructional program.

Source: School system budget and personnel documents.

Non-Professional Staffing

Non-professional positions in a school system are those positions which do not require extensive training (or a bachelor's degree) and which are not considered as professional under the laws and regulations established by the State. Examples are school bus drivers and custodians. ^{1/} These positions are, however, crucial to the functioning of the educational program offered to the student membership. The number of non-professional positions divided into the instructional and non-instructional components which they serve is shown for the participating school systems in Table XIII on the following page.

In compiling the data for Table XIII, it was found that each of the school systems were, for the most part, in accord in their classification of non-professional personnel. Where a variation in a definition occurred in a system, the data were adjusted to be in agreement with the definition used by the other participating systems. Unfortunately, information on numbers of non-professional staff members in Boston was not available; therefore it is not reported in this study.

^{1/} State Educational Records and Reports Series: Handbook VII, U. S. Department of Health, Education, and Welfare, Office of Education, 1971, p. 149.

Table XIII*

NUMBER OF INSTRUCTIONAL AND NON-INSTRUCTIONAL
NON-PROFESSIONAL STAFF MEMBERS
FOR FY 1974 AND FY 1975 1/

School System	Number of Non-Professional Staff				Total Number of Non-Professional Staff	
	Instructional ^{2/}		Non-Instructional ^{3/}			
	1973-74	1974-75	1973-74	1974-75	1973-74	1974-75
Atlanta	408	481	1,749	1,685	2,157	2,166
Baltimore	541	470	3,026	2,511	3,567	2,981
Boston	<u>4/</u>	<u>4/</u>	<u>4/</u>	<u>4/</u>	<u>4/</u>	<u>4/</u>
Cleveland	1,600	1,668	2,565	2,675	4,165	4,343
Milwaukee	1,394	1,935	959	994	2,353	2,929
St. Louis	279	404	1,372	1,339	1,651	1,743
San Francisco	513	144	1,325	1,324	1,838	1,468
Washington, D. C.	137	132	2,283	2,470	2,420	2,602

1/ Based on regular appropriated funded positions..

2/ Includes all non-professional level positions, both central and local school based, in line and staff functions related to the instructional program.

3/ Includes non-professional level positions, both central and local school based, in line and staff functions not specific to the instructional program.

4/ Data not available.

Source: School system budget and personnel reports.

Total Staff Per Thousand Students

The importance of the "resource mix" in providing an educational program to students has been discussed earlier in this study. Much data has been presented on the specific categories of the positions in the "resource mix" of the participant school systems. The consolidation of these data into a total number of positions indicates the personnel strength of these selected school systems. The computation of a ratio of personnel to the number of students enrolled directs attention to the provision of staff services. Basing this computation on one thousand students enrolled further expresses the intensity or lack of adequacy on the part of a school system in providing staff services to the student membership.

Total school system staff in numbers and in terms of ratios per one thousand students for FY 1974 and FY 1975 is shown for the participating school systems in Table XIV and Exhibit IV on the following pages.

Table XIV

NUMBER OF SCHOOL SYSTEM STAFF, STUDENT MEMBERSHIP AND NUMBER
OF SCHOOL SYSTEM STAFF PER THOUSAND STUDENTS IN SEVEN
LARGE CITY SCHOOL SYSTEMS FOR FY 1974 AND FY 1975

School System	Student Member- ship Based On Full Time <u>1/</u> Equivalent		Total School <u>2/</u> System Staff		Total Staff Per Thousand Students <u>1/2/</u>	
	1973-74	1974-75	1973-74	1974-75	1973-74	1974-75
Atlanta	85,380	82,611	7,785	7,371	91.2	89.2
Baltimore	176,553	167,063	13,189	12,881	74.7	77.1
Boston	93,647	87,169	<u>3/</u>	<u>3/</u>	<u>3/</u>	<u>3/</u>
Cleveland	131,105	125,227	10,888	11,083	83.0	88.5
Milwaukee	118,283	113,643	8,873	9,259	75.0	81.5
St. Louis	90,383	87,215	5,961	5,975	66.0	68.5
San Francisco	73,955	69,805	6,743	6,165	91.2	88.3
Washington, D. C.	130,928	128,930	10,480	10,710	80.0	83.1

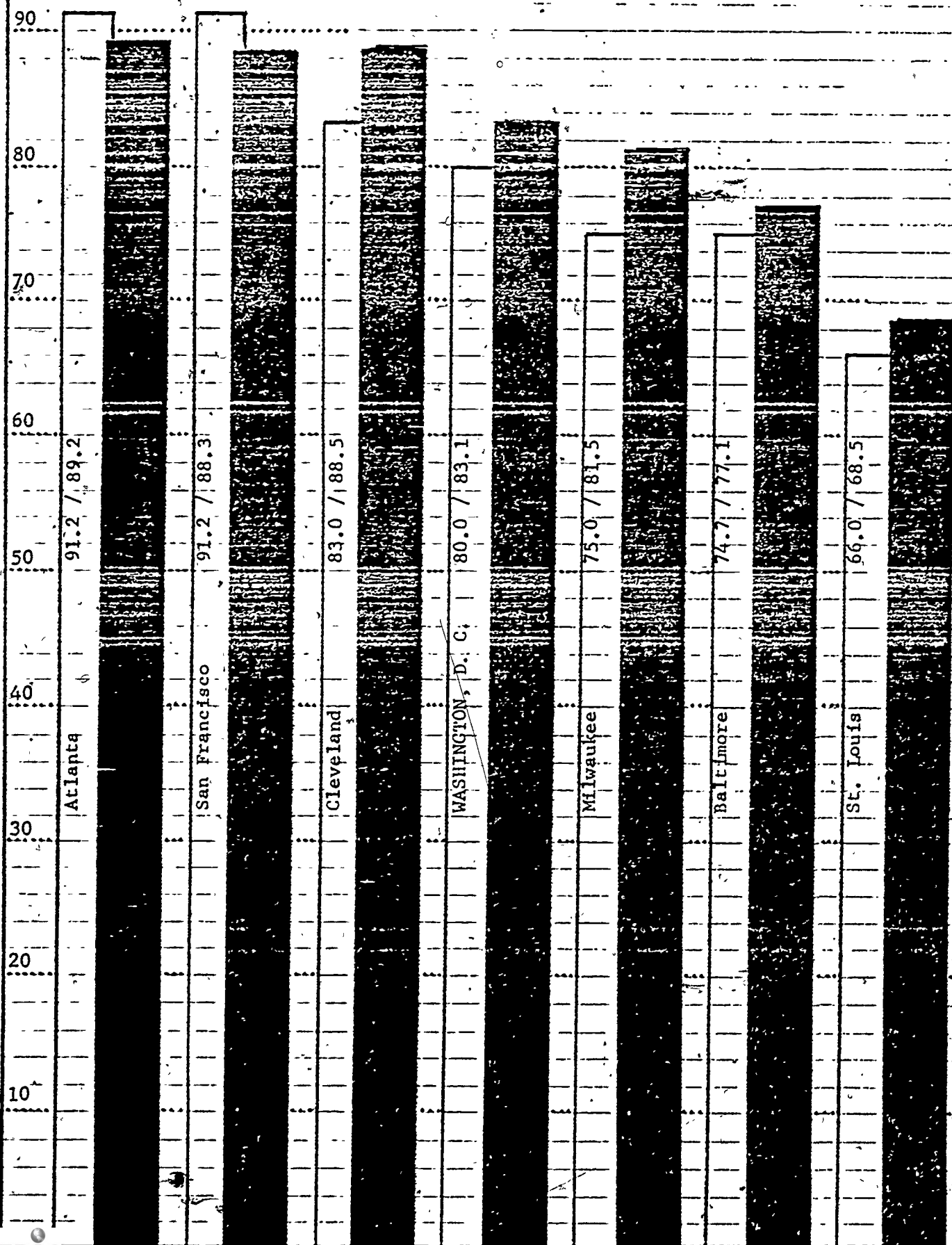
1/ Fall membership adjusted for full time equivalents

2/ Includes only staff funded by regular and appropriated budget.

3/ Data not available.

Source: School system budget, membership, and personnel reports.

TOTAL SCHOOL SYSTEM STAFF PER THOUSAND STUDENTS IN SEVEN LARGE
CITY SCHOOL SYSTEMS, FISCAL YEAR 1974 AND FISCAL YEAR 1975 (FY 1975 Shaded)



Sub-Study Three

A COMPARISON OF COSTS AND PROGRAMS IN THE AREA OF SPECIAL EDUCATION FOR EIGHT LARGE CITY SCHOOL SYSTEMS

Introduction

The initial purpose of this sub-study was to compare the special education programs and associated per pupil expenditures for the eight large city school systems in the study. However, as the data was collected, the study team quickly found that this objective would have to be modified. Although a great deal of special education program and cost data was available for analysis, it was not possible, within the constraints of the present study, to develop comparable statistics. The reasons for this lie in the widely varying programs and services offered, pupil accounting procedures used, funding sources available, and budget conventions followed by the eight school systems.

Sub-Study One, dealing with expenditures per pupil, developed procedures for overcoming these problems. Given adequate time and resources, similar procedures could be applied to the area of special education, and useful comparative data could be generated. In fact, a major accomplishment of the overall study was the development of procedures which could be extended in the future to deal with various areas of special interest. (The steps needed to do this for special education are discussed in the following sections.)

Even though this sub-study did not achieve its initial objective of a compilation of truly comparable data, a great deal of useful information was collected and a number of important conclusions were reached. These conclusions and some related recommendations make up the next section of the sub-study. The remainder of the sub-study discusses the nature of the special education information collected, the procedures needed to develop comparative data, and examples of the inconsistencies in current special education statistics.

Conclusions and Recommendations

Special education is an important component of the educational system. It uses a significant amount of the total resources available, and it is an area in which there is a great deal of current interest. Because of this, it deserves careful study by educational administrators. Further, it is an area under change. New priorities, new legal requirements and new approaches are causing major shifts in programs. Therefore, it is essential that the effectiveness of various alternatives be studied.

An important finding of the study is that comparable data among programs and among districts is not readily available. Not only do the actual programs differ in terms of approaches and levels of services provided, but also the basic budget and pupil statistics lack a common basis for comparison.

As shown in Sub-Study One, it is possible to produce comparable statistics in the form of expenditures per pupil. The necessary steps include the establishment of common program elements, adjusting direct costs to conform to the common elements, establishing appropriate indirect costs and adjusting pupil counts to a common base. These steps should be followed before conclusions are drawn relative to the comparison of programs in various school systems.

In addition, the total cost of educating these students should be taken into consideration when comparing programs. Because many special education programs are supplemental in nature (particularly

with the concept of mainstreaming) some or all of the per pupil cost of providing a regular program of instruction should be added to the per pupil cost for the special education program in order to determine the total cost of providing educational services to these students.

Finally, the importance of developing comparable special education statistics should not be underestimated. Differences in the procedures being used to produce program cost and pupil counts can result in major distortions of the accomplishments for the funding involved.

Nature of Current Special Education Data

The purpose of this sub-study was to collect and present comparable special education statistics. It was not the intent simply to present eight sets of detailed special education data for the school systems in the study.

In order to compare programs, it was necessary to establish some standards against which each program could be measured. The first area to be studied was the basic program structure itself, and an attempt was made to define a common set of special education programs. The following categories were selected based on a general review of the special education field.

Gifted and Talented

Mentally Retarded

Educatable (EMR)

Trainable (TMR)

Severely Retarded

Physically Handicapped

— Visually Impaired

Hearing Impaired

Speech Handicapped

Crippled

— Multiple Handicapped

Emotionally Disturbed

Learning Disabled

Other

Home Instruction

— Hospital Instruction

Etc.

Although the special education programs of the eight school systems generally fit these categories, there were major exceptions.

Some of the school systems, including the District of Columbia, are moving away from the traditional programs which clearly label children as members of particular groups. Other districts have combined or redefined some of their programs. Still others do not have programs in certain of the general categories. The result is that neither the total special education program nor specific program categories are comparable among the eight school systems.

Furthermore, the concept of "mainstreaming" special education students where possible has made it difficult in many cases to establish the actual level of "treatment" being provided by special education funds.

The question of sources of funds leads to another problem area. Most special education programs are considered to consist of those services provided by clearly identified special education funds or budget categories. Unfortunately, such items as program administration, pupil transportation, and food services are not always included. Also, federal funds for special education are handled in different ways by the school systems.

Pupil accounting creates still more problems. Not only do the systems use different basic statistics (e.g., average daily membership, average daily attendance, fall membership), but in the area of special education they use a variety of techniques to count students. Because many special education programs do not serve students on a full time basis, some systems convert their headcount figures to full time equivalents, while others do not. Also, some systems use cumu-

lative student counts, while others use an average or the count at a given point during the school year. The overall effect of these factors is to make it impossible to present comparable statistics in the area of special education without making a number of major adjustments in the available data.

Considerations for the Development and Use
of Special Education Statistics

This final section of the sub-study describes the steps which can be followed to produce realistic special education program data for assessment and planning purposes. It also points out a number of the problems in trying to use unadjusted data for comparative analyses.

Sub-Study 1 developed procedures for calculating school system per pupil expenditure data from city wide expenditure statistics. The same general procedures can be applied to individual programs or services, with a few modifications.

Overall expenditure per pupil data allocates the school system's costs of educational services to all students on a per pupil basis. There is no need to distinguish between direct and indirect costs nor to allocate costs in different proportions to various groups of students. However, where per pupil cost data for specific programs are involved, additional steps are needed. The procedure is described in the following paragraphs.

As with overall district statistics, it first is necessary to define those programs or functions to be included. A set of major special education categories was presented in the preceding section. These may be appropriate for some districts and not for others. In any case, the basis for establishing "direct" special education costs must be specified. For example, if the purpose of the data is to

compare special education centers with mainstreaming, the direct cost components of each approach must be identified.

Care must be taken to insure that such items as transportation, fringe benefits, and direct program administration are taken into consideration. Such costs are not always included in a school system's special education program budget data, yet they can account for a significant portion of the total direct cost.

Most important is the step to determine the costs of the direct services and functions for the time period being studied. This may involve estimating some costs, because cost information may not be available at the needed level of detail. For example, the costs of transporting special education students may be included in a single pupil transportation figure for the district.

To the direct special education costs must be added any other direct costs associated with the students receiving the special education services. For example, if the secondary students in a program for the gifted also attend some regular classes and participate in other normal school-based activities, the associated direct costs must be added to the direct costs of the gifted program in order to obtain the total direct costs for such students.

After all direct costs have been determined, indirect costs must be allocated. These include general administrative costs and other system-wide functions not directly allocated to programs or students.

To complete the special education per pupil expenditure computation, a measure of the pupils being served must be developed. Since many measures are used such as fall membership, average daily

membership, average daily attendance, full time equivalents, headcounts cumulative totals, and hours of student participation, one common measure should be selected for comparing expenditures, then all pupil counts can be converted to the common base.

Taking these steps it is possible to calculate per pupil expenditure figures which provide a realistic basis for assessing the costs of various special education programs or delivery systems.

The following illustrations show the importance of developing appropriate statistics for making program comparisons:

Two school system budgets provide comprehensive programs for the mentally retarded. The budget office of each school system produced direct cost data for its program. School system A's cost was \$2,800,450 for the 1973-74 school year. School system B's cost was \$2,368,380. However, school system B did not include pupil transportation or employee fringe benefits in its figure. When these costs were added, school system B's direct cost was raised to \$2,975,450, making it higher than that of school system A.

A second example shows that school system A reported its pupil participation in the mentally retarded program as 1,350 students. School system B reported 1,730. However, school system A used a full time equivalent basis, while school system B used a cumulative headcount. When school system B's figure was adjusted to a full time equivalent base, it was lowered to 1,412. School system

B's program included more mainstreaming of students than school system A's program, therefore, it was calculated that additional direct costs of \$563 per pupil should be added to its direct special education program costs, while only \$245 per pupil were added to school system A's program cost to reflect additional educational services to the students in the special education program.

Situations such as these do exist for the eight school systems in this study, and the development of comparable statistics is essential before program comparisons are made.

Sub-Study Four

A COMPARISON OF CAPITAL OUTLAY PROGRAMS AMONG EIGHT LARGE CITY SCHOOL SYSTEMS

Introduction

The objective of this sub-study is to examine and compare the current capital outlay programs of the eight school systems in the study.

In Sub-Study One, dealing with expenditures per pupil, capital outlay was one of the budget categories removed from the expenditure data to arrive at an Adjusted Operating Budget figure for each system. Nevertheless, capital outlay is an important component of any system's total budget, and the processes of determining resources and expenditures in this area are central to the overall budget process.

This sub-study first examines the various capital outlay programs followed by the systems in the study and then summarizes the results in terms of a number of comparable parameters.

ATLANTA

The Atlanta Public Schools carries Capital Outlay as a major category in its General Fund budget and also in a separate Building Fund. The total capital outlay budgeted for 1974-75 is 8.6 million.

The General Fund capital outlay expenditures are for site acquisition, additions and improvements, remodelling of buildings and new equipment. The Building Fund carries new buildings and building additions.

The major source of revenue for capital improvements is an annual 4 million dollar bond issue authorized by the tax payers in 1968. The only supporting data required from the system is an annual estimate of the millage rate needed to meet principal and interest payments.

Planning for capital improvements is done on an annual basis as part of the normal budget process.

BALTIMORE

The Baltimore City Schools has a Capital Budget, distinct from its Operating Budget, that covers its capital outlays. However, debt service is carried as a major element of its Operating Budget.

For 1974-75, the Capital Budget is 22.5 million, and the debt service component of the Operating Budget is 23.3 million.

The Capital Budget includes expenditures for new construction, modernization, renovation, additions and major repairs.

BOSTON

The Boston Public Schools does not have its own capital budget. All construction and capital budgeting for the system is handled by the Public Facilities Department of the City of Boston.

This department was established in 1966 and handles all capital improvement programs for the city. (Only minor renovations are handled by the school system.) Working with the system and the State School Building Assistance Bureau, it selects sites and develops programs on an annual basis. In addition, a ten-year capital improvement plan for the city is maintained.

The City of Boston is responsible for selling the necessary bonds. The State provides up to 75% of principal and interest as aid to the city.

A major school system capital improvement study made in the 1960's is the basis for much of the current planning. However, the desegregation order now in effect has forced modifications in the capital outlay program.

CLEVELAND

The Cleveland City Schools carries a minor capital outlay account in its General Fund for motor vehicles; but the majority of capital outlays are included in the Permanent Improvement Funds. Debt retirement is carried in a Bond Retirement Fund.

The 1975 calendar year budget includes 3.5 million in capital outlays for new equipment, new buildings, improvements, land purchases, and architects and engineers. (The 1974 capital outlay budget was 25 million.)

Revenue for capital outlays comes from the sale of bonds and notes. Voters approved a total of 221 million from 1962 through 1970. A balance of 10 million is planned for issue this year. Matching funds from federal and state sources also contribute to the capital outlay revenues.

The Bond Retirement Fund expenditures for 1975 are budgeted at 18.1 million.

In addition to the justification required when voter approval is sought, the Board must provide the County with supporting information when it requests the issuance of approved bonds (which it must do within five years).

MILWAUKEE

The Milwaukee Public Schools carries a capital outlay account in its operating fund for facilities improvement and equipment (3.1 million in 1974-75), but the majority of capital expenditures (13.9 million in 1974-75) is included in the Construction Fund. Debt service is handled by the City of Milwaukee.

In 1970 the voters approved a 60 million school bond referendum to provide funds for construction, additions and site acquisition. As of 30 June 1974, 44.3 million of approved funds had not been issued.

Extensive demographic and other planning studies are used to develop capital improvement programs.

ST. LOUIS

The St. Louis Public Schools includes a small capital outlay account in its Operating Budget to cover building improvements and equipment costing over \$300, but significant capital expenditures are covered in the Building Fund (.9 million for 1974-75).

The system is carrying out virtually no major capital improvement programs, and there are no specific long-range plans for the future.

SAN FRANCISCO

The San Francisco Public Schools carries its capital outlay accounts in the Facilities Acquisition and Construction category of its General Fund.

However, with the exception of 4.6 million for state-mandated earthquake safety programs, there are virtually no capital improvement projects in the budget.

Traditionally, the system has included capital outlay programs as a normal component of its general budget. In the period between 1948 and 1972, the system replaced 14 schools built prior to 1933. Since then, all efforts have been directed toward reaching compliance with the earthquake safety requirements.

A 1973 bond program was developed to provide the funds needed for the reconstruction work.

WASHINGTON, D. C.

The Public Schools of the District of Columbia prepares a separate Capital Budget each year, as well as a five year projection of capital outlays. The budget is based on a scope of work prepared by the system and submitted to the General Services Administration for approval and costing. In addition, a technical advisory committee reviews all proposed capital improvement projects of the District of Columbia.

The Public Schools' capital budget then becomes a component of the District of Columbia's annual budget submitted to the Congress. The system's capital budget for 1974-75 is 16.9 million and covers costs for sites, construction services, construction, and equipment.

Beginning with the 1975-76 budget year, there will be a major change in the source of funds for capital programs. All new capital improvement projects must be funded through District of Columbia bond issues. Therefore, in addition to the steps outlined above, the system must seek approval for the issuance of bonds to cover each new capital improvement project.

Analysis of Results

The 1974-75 capital outlay programs for the eight systems in this study vary a great deal in size and, to some extent, in purpose.

For any given year, a system's capital improvement budget is a reflection of a number of important factors. These include past bond authorizations, past capital outlays, location and condition of sites and buildings, past and projected trends in student population, current level of debt service, local economic conditions, sources of special funds and aid money, long term capital improvement programs, overall budget limitations, and unique conditions such as court-ordered desegregation.

As a result of these factors, it is unrealistic simply to compare current year capital outlays among the systems. However, there are some significant areas of comparison which are of interest for planning purposes.

In addition to the wide range of total capital outlays among the systems for 1974-75 (.9 - 22.5 million), the specific uses of funds differ somewhat for each system. This is partly the result of differences in the definitions of capital items, but is primarily due to differing needs for site acquisition, new construction renovation, additions, improvements, equipment, and major repairs. The mix of applications also is a function of the availability of special and matching funds from state and federal sources.

In most of the systems in the study, the majority of capital outlay expenditures are accounted for in one or more special funds (e.g., Building Fund, Capital Budget, Permanent Improvement Funds, Construction Fund). This reflects the fact that the sources of funds for capital outlays usually are distinct from general operating fund sources and involve voter approval of bond programs.

With the exception of the District of Columbia and Atlanta (which has a continuing 4 million dollar per year bond authorization for capital outlay), the systems in the study periodically must seek voter approval for capital improvement funding. As a result, success or failure in bond referendums is a critical factor in future capital outlays. Beginning with the 1975-76 budget year, the District of Columbia system also will be facing this situation.

Generally, approved bond programs provide for the actual issuance of the bonds over a period of years (e.g., five years for Cleveland) and for some flexibility in the timing and use of bond revenues to respond to local construction conditions and system capital improvement schedules.

Control over the capital budgeting and improvement programs varies among the systems being studied. San Francisco includes capital outlay programs as a regular component of its general operating budget, (with the exception of its state-mandated earthquake safety program). At the other extreme is Boston, where a City agency handles all capital budgeting and construction for the system.

Debt service also varies among the systems. For example, Baltimore carries debt service in its operating budget. Cleveland

uses a bond retirement fund and in Milwaukee the city is responsible.

Capital outlay planning differs a good deal among the systems as a result of the various factors discussed in this sub-study. However, two common denominators are the declining student populations and the need to continually adjust plans to reflect changes in the availability of funds and in the relative priorities in annual budgets.

Conclusions and Considerations

The current needs of school systems for capital improvement programs vary a great deal and primarily depend on past capital outlays and on pupil population trends.

The nature and extent of these needs generally are well defined as the result of the use of a number of effective techniques for program planning and population projections.

However, the extent to which these needs are being met varies considerably as a result of a multitude of factors. Primary among these is the community's perception of the relative importance of these needs, since this directly affects the level of resources made available to the system for capital improvements.

Therefore, the ability of a system to "sell" its capital improvement programs and related bond issues is critical to the meeting of needs in this area. For the Public Schools of the District of Columbia, this will be an additional challenge in the years to come.

The use of comprehensive comparative data from other systems can be an effective sales technique, provided that the many factors influencing the capital outlay area are taken into consideration. In preparing this sub-study, it became clear that to do this properly would require information covering a number of years, since the effects of the major factors are long term in nature, and since in any given year each school system is at a different point in its capital improvement program.

ADMINISTRATIVE SUMMARY

The overall objective of this study is to present comparative statistical and program information for selected large city school systems.

The study includes four sub-studies, each dealing with a major area of high priority interest to the Public Schools of the District of Columbia. Expenditures per pupil, the subject of Sub-Study One, and staffing, the subject of Sub-Study Two, are key indicators of the level and allocation of resources within each school system. Sub-Study Three, dealing with special education, and Sub-Study Four, dealing with capital outlay programs, look at two specific areas of importance in current planning and budget efforts. A fifth sub-study, in the area of early childhood programs, originally was planned. However, a lack of common definitions and detailed cost data from the systems being studied precluded the development of this sub-study.

The many difficulties involved in using figures generally and readily available in the areas covered by this study have been discussed in the various sub-studies. Also, the methods used by the study team to deal with these problems and to generate more comparable statistics have been presented in detail.

The purpose of this administrative summary is to emphasize a number of critical points regarding the results of the study and to offer some conclusions reached by the study team.

Comparisons With Other Measures

Each of the sub-studies presents a large quantity of detailed information. There is a natural tendency on the part of the reader to concentrate, however, on those summary tables and exhibits which present an overall picture of each area. The danger in that approach is that the specific computational procedures and constraints will be overlooked and invalid comparisons with other outwardly similar measures will be made.

There are many ways in which basic statistics such as expenditures per pupil can be computed. The procedures used in this study were selected because they permit comparisons with currently used statistics for the District of Columbia Public Schools, while retaining most major operating programs and services in the computations. Therefore, direct comparisons with measures from other sources and with other reports should not be made unless the specific computational procedures are found to be similar.

Accuracy and Sources of Information

The results of the sub-studies are based on detailed source data from the eight participating school systems. The computations and adjustments have been carefully reviewed to insure the accuracy of the information. Although the accounting and budgeting systems of the school systems differ with regard to program and expenditure categories, common bases for allocation were established.

As a major by-product of the study, a comprehensive data base of budget and program information for each of the school systems has been created and sources of additional information identified.

Importance of Adjustments

A thorough review of adjustments made to basic expenditure and pupil membership data reveals many things about the relative priorities assigned to the various major programs and services offered by each school system and its community. Even where adjusted per pupil expenditure figures are nearly equal, each system allocates its total resources in significantly different ways to meet local needs.

The relative sizes of the expenditure adjustments, as shown in Sub-Study One, clearly reflect major differences among the school systems in such areas as capital outlay, adult education, health services, summer school, and community services. These differences, in turn, are related to differing levels of basic program services, since all expenditures are tied together in the overall operating budget.

Differences Among Systems

The spread in expenditures per pupil and staffing figures among the eight school systems, even after establishing a "common base" for measurement, is the result of differing levels of services being provided and the "unit costs" of such services. Both of these factors vary significantly among the systems, and the major conclusion to be drawn from the results of this study is that although a reasonable

basis for comparison has been created, the school systems should not be "rated" simply on relative levels of such measures as expenditures per pupil or staffing per 1,000 students. It is necessary to take into consideration local priorities and indices of costs.

Value of the Study

The value of this study lies in the utility of the results for budget development, program planning, and evaluation purposes.

Effective administration of a large school system requires sound planning and evaluation functions to support the decision-making process. These functions, in turn, require easily understood, common measures for assessing the impact of current programs and for comparing alternative strategies to meet priority needs.

As this study has shown, currently used statistics such as expenditures per pupil generally do not use a common base and can be very misleading. However, the study also has shown that truly comparable measures can be developed.

Using the Results of the Study

With the 1973-74 and 1974-75 data as a base, the impact of changes in local priorities and related program and operating adjustments can be assessed in terms of basic, comparable indicators. This requires that on-going data collection and analysis activities be maintained and that the procedures developed in this study be extended down to individual program and service areas of special

interest. A logical step in this direction would be the development of comparable program measures for special education, as outlined in Sub-Study Three. This important area then could serve as a model for other programs within the system.